A COMMISSION OF CARDINALS STUDY DEMOCRACY.

Forming This the Vatican Tields Nothing to lis Opponents-Three Significant Rebuffs to the Anti-Democrats in the Church-The Well-Planned March of the Papacy Goes on Without Interruption.

ROME, Sont. 1 .- The adversaries of the party of Christian democracy have at last lost confidence. On the morrow of the incident of "Americanism" and of Mme. Marie du Sacré-Coour, after a defeat which they had gone out of their way to seek, they have taken up he offensive. They are always ready to begin again. When they are beaten on one point, they open the discussion anew on another. They had hoped that Rome, in condemning the romantic, continental "Americanism" would by that set hit stall Christian democrats. With unfailing authority and an exact discrimination of ideas and interests, Leo XIII on the contrary, has succeeded in turning the Impassioned discussion to the honor of socialtat Catholies.

Being disappointed, the opposition immedistely devised a new campaign. From Belgium an attempt was made to bring pressure to lear on the Pope, in order to have him condemn the Christian democrats. In Italy the reactionaries and the Quirinal party, some for one reason, others for another, have attacked them. The supporters of the present order of things fear the powder train, the oil track of democratic ideas; for the triumph of Christian democracy would indicate in more than one way the success of federalism and the end of the dualism of Italy and the Pontificate. As for the actionaries, they protest against Christian democracy because they are settled in antiquated habits of mind. It is so long since they have wound up their watches! In Austria and in Germany the same phenomenon has occurred. The feudalists, the Junkers and the imperialists have connected themselves on the one hand with the Kaiser, on the other with the old parties that keep up stupidly the policy of leaving well enough alone."

The coalition on a new basis has not got the better of Leo XIII 's serene inflexibility. The Fore has refused to follow the advice of the Belgian Government just as he resisted the indiscreet pressure of the Germans, the Austrians and the Italians. But, yielding and supple. Leo XIII gave the impression of morally satisfying these inscient demands. he wishes to spare the old ideas and the old parties with the object of making the transiions easier, he has established a commission of Cardinals under the presidency of his Eminence Cardinal Aloisi-Masella, for the purpose of studying all the democratic questions. The opposition, at first sight, seems to profit

by this. It has not noticed the Holy Father's shrewd smile It apparently regards the commission as a partial success. It knows neither the Holy Father nor the ways of the Court of Rome. At the very moment, in fact, that the Vatican established this kind of inquest, it marked clearly its policy of government and its litical inclination. Several facts have combined to show that Bome held steadfastly to its far-reaching place. In the first place we must notice the attitude

of the Osservatore Romano, the journal which of factorest to the Vatican. Under the editorship of a former conservative of Bologna, Signor Cascat, it had begun the pub leation of a series received orders from the Holy Father to stop the articles. In the next place, a north-Italian ergan, taking advantage of the confusion exceed by the "Americanism" incident had rmulated a long criticism of demogratic ideas. To give the articles more weight permiss on was asked from the Vatican to authorize their publication. Rome gave orders that silence to preserved. Thirdly, the anti-democrats had carried on in Rome itself an insidious compaign against a young priest, Abbate Murri, the sagacious and brave editor of the Coltiera Sociale. He is a sincere demoent, and was described as a busylody, a disturber, an exciter of discord. He was to he smitten by ecclesiastical authority. It was scandalous that under the very shadow of the Vatican he should herald progress, demand necessary reforms and methods of work, and encourage in the name of the Gospel and theology the normal and fruitful development of democracy! Already those fond of anathemas and of the prescription of men of action had announced that Abbate Murri had fallen into the deepest dislavor. Now it turns out that no condemnation has been inflicted on the doughty writer who enjoys more and more the favor of the high seclesiastical power.

must not omit mention of the significant article by Signor Toniolo, the Father Joseph of Leo XIII, in the Rivista Internazionale of Rome, though making some platonic reservations on congratulated Abbd Gavrand on his boldly planting the Catholic banner on distinctly democratic territory. Competent and timid. advancing only at the desire of the Vationa. Bignor Toniolo's manifestation of approval is of great authority. It is a visible sign of the broad Roman current.

Home has mapped out her policy for a long time, it will remain unchanged for many years. The democratic policy of the Holy See s not merely a collection of doctrines of which the encyclical "Berum Novarum" is the authentle exponent; it marks a doctrinal and practical direction, which nothing will modify, neither the interests of some, nor the faults of others, nor the passions of all. Supposing even that in some country, some democrat or some group oversteps due mea-ure and gives grounds for eritleism, such backsliding or imprudence will have no effect on the march of Roman ideas and instructions.

They will be meaningless incidents in the nausual cases where the moderating power may pay any attention to them. To criticiae a given author, to place a book in the Index Expurgatorius, to disapprove the exaggerated statement of a democrat; all this is of no importance. What is essential, fundamental and immutable is the orientation, the general line of policy, and the orientation, this line of polley is distinctly progressive and democratic. It is none the less needful that friends of the policy should continue to preserve proper measure by giving the "old" no pretexts for attacking the "young." INNOMINATO.

THE CREVALLES.

Fishes at the Aquarium That the Children Call the Merry-Go-'Rounds.

Children looking at the crevalles in their tank at the aquarium, call them the merry-go-round fishes, because they are constantly circling around in their tank, following one another like the animals of the nerry go-round. The cravalles are singularly nervous and sensitive, and they are always on the go.

These crevalles have now been in captivity more than a yest, which is perhaps longer than any were ever kept before; certainly longer than one have been kept in the aquarium, these being the first to be carried through a winter, which was made possible by the extension of the aquarium's warmed sait weier supply, so that some others than tropical fishes could have the benefits of it. Size execute goes South in winter, where, in some waters, it is abundant. It does not come North in numbers every summer, its visits are irregular. and sometimes there are none here worth men former for four or five years; so that on the whole at is rather a rate fish in these waters. These combled in size and weight since they were nut in-

Healdes being nervous and sensitive and easily frightened. Each the crevaile is a fish of beauty with its sides of solid, silvery pearl.

Somebody's Big Tarpen Found.

on the Galveston | willy News, Coupus Chillary, Tex., Sept. 6.—While flah-ag at Flour Buff on Sept. 1, 1 had the good of tolamina, had butch tarron. He was a busiless at I lastful with him for two long aura. When the monster was landed I obseed he had something attached to his tail, in investigation it proved to be a wooden tag. On investigation it proved to be a wooden tag.
The fallowing was carved into the tag;
"Havana, Colos, July 30, 1868; Remember
the Mainer, B. L. F., Co. A. First T. V. G."

GHOSTS, FOR SURB! A Florida Editor Converted to Believing in

Them-His Narration of Facts. TO THE EDITOR OF THE SUN-Sir: Knowing that THE SUN is the leading paper of the United States, and knowing also that it is always anxious to get hold of the cream of the news of the world. I send you a true ghost story. I publish a weekly newspaper at this place and have been in the newspaper bustness for twenty years, and this is the first time in my life that queer things happen around where I resided that could not be solved. Every line that I have written is the truth. I have not published one line in my paper in reference to what I have written you for publication. Yours, &c.,

S. A. FACKLER, Editor and Proprietor The Williston Hustler, P. S.-If you publish my matter you can sign my full name to said article. WILLISTON, Fla., Sept. 13.

A TRUE GROST STORY. Is it not strange that a man 45 years of age, with fair intelligence, sober, and who have knocked over this world a great deal and have always been skeptical, and abhorred the idea of such things as ghost, to be made to believe in such supernatural agencies this late in life? Such is our case, and we are almost ashamed to own it, but nevertheless it's true. will state right here that we are looked upon as a sober, truthful, bonorable man by those who know me (and their name is legion), and what we relate below, my wife, children and self are all willing to make sworn affidavits, if necessary, that queer things hapreside in Florida in a small new town, right on the main line of the Plant System R.B. lead ing from Wayeross, Ga., to Tampa, Fla. Our residence is a nine-room, two-story structure, with barn and stables, situated about on quarter of a mile from the heart of town. The first indication we had that strange things happen around the place was about three months ago. About 11 o'clock in the forenoon we came up home on our bicycle and just before we got to the lot gate we heard a terrible hammering in the buggy shelter. We made sure that it was one of our little boys out there, and we called to him to come and open the gate for us. He heeded us not, and we called twice more in a very loud tone, to come and open the gate. He failed to some and we got mad and intended to correct him for not coming when we called him to open the gate for us. We opened the gate ourself, gathered up a switch, and made for the buggy shelter with the full intention of switching When we got to the buggy shelter we him. found no boy there. We went into the house and told our wife about it. "Why," she said, "Johnnie, nor any of the children have been about the stables to-day."

We have a small outhouse situated out about forty yards from the residence and the door is hard to open. That door will open and shut twenty-five times a day without any human being near it, and it is awful hard to open with your hands.

The other morning about 11 o'clock my wife was sitting in the dining room near the table pealing some peaches. We were sitting opposite her. Our pointer dog was in the room picking up crumbs from around the table, and all at once we heard him hallowing and looking in the direction where he was at the time we saw him getting up from the floor. He of naticles against the Italian democracy. It got out of that room in a hurry. My wife says that she was looking right at him and heard the lick that knocsed him down. The first thought struck us was that a stray bullet had come in the window and struck him. But after an examination of the canine, abandoned that Idea.

A couple of Saturdays ago our little boy brought a peck of Irish potatoes from town

A couple of Saturdays ago our little boy brought a peck of Irish potatoes from town and set them on the dining table. My wife was in the kitchen when the boy came in, and we were sitting in the back plazza opposite the table, reading. Fretty soon my wife came into the dining room, took the potatoes and placed in m further on the table—about two feet. She had no more than returned to the kitchen, when I heard sometining fall to the floor. On looking around there was the bag of potatoes laying on the floor. There were no children about the house nor nothing apparently to throw them off. There was plenty of room for them to have eaught upon the table—but they didn't.

A few nights ago, after the children had all gone up stairs and retired and everything was as still as death, my wife and self were sitting by the centre table reading, when all at once we heard a loose stream of water pouring from somewhere, and it counded like it was up stairs. We hallooed and asked the children who was thut pouring water up there. By that time they were all out of bed, coming down atairs. They said that it was none of them, and that it sounded like it was down stairs. It went like you were fluring a stream as large around as your leg into a barrel about half full of water. Finally, after we quieted the children and they went back to bed, the water-pouring started up again—and this time is seemed to be in the parior. We looked that night, and we looked next morning, and we have not been able to find out where that water came from nor where it went to yet.

Night after pright you can hear someody

pouring started up again—and this time is seemed to be in the parior. We looked that night, and we looked next morning, and we have not been able to find out where that water came from, nor where it went to yet.

Night after night you can hear somebody walking up stairs and down stairs with an old all selection, that within the past three months that walking has caused us to search the assection, that within the past three months that walking has caused us to search the house fifty times, with pistod in hand looking for burglars. The walking at night is getting to be so common that our children don't pay any attention to it.

A few nights ago, after my wife and I had retired, and everything was still I was laying in bed fanning the mosquitose off with a newspaper, as it is my custom at nights. Pretty soon I heard something fall in the next room like a large foli-di newspaper. Fretty soon I heard one fall in the hallway, then one fell atour chamner door, then one fell behind our door. My wife got up and looked and sure enough there were the payers. In the meantime we had ceased to fan mosquitose and had laid the paper we had over on the bed. When my wife redred again she put her right loot over the newspaper that I had been using. She had not been in bed more than two minutes the second time, when "slap" went a paper right down by our bed. My wife raised up in the bed and looked on the floor, and remarked, "that it was identically the same paper we had." And aure enough it was, for we got out of bed, picked the paper up, and carried it to a lamp that was burning low in the room, and looked at the dare. The reason that we are so positive that it was the paper we had on the bed is, it was the Atlanta Condition of a late date that we had been reading before we retired that night.

We have a son ld years old, and two smaller hops, who sleeps up sairs. They are not searcy, but last hight had to quit their room. Soon after they had retired something caught ho do fone of the little bors' hands and come near pulling him

DOLL HEADS.

Some of Metal Included Nowadays in the

Variety Supplied. Years ago doll heads were made of wood, carve out by hand, and great numbers of dolls were sold that were entirely of wood, with jointed arms and legs. Some dolls of this sort, looking quaint enough now, though they were once so common, are att I sold, but the great bulk of the dolls now made have bodies of cloth or leather, with heads of ons were taken in Gravesend Bay; they have china, bisque, or papier-mache. There are also now dolls' heads of metal; these heads being made of brase in two parts, stamped out with dies and

> joined together. In the process by which these heads are made many dies are used in the production of a single head, the metal being worked to its final shape gradually The first die makes but a barely perceptible impression upon the piece of sheet meta from which the head is to be formed. The next shapes it a little more; and so on by pressure from auccessive dies, each a little more sharply defined, the head is brought finally to its perfect form These heads are made in various sizes, and in various styles as to details of finish. They cost about the same as the best bisque beads; but one of the merits claimed for them is indestructibility.

POEMS WORTH READING

My City. 'Tis of Thee. My city, 'tis of thes, Mighty on land and sea, Of thee I sing. Under broad heaven's dome. Par though from thee I roam To thee I cling.

Still ar: thou e'er my home; Isle where the Hudson flows, Isla where the sea wind blows, To thy brave ploneers, Who in thy early years Held thee through blood and tears,

Homage I bring. Isle of the glorious bay, Isle of fair freedom's sway, Of thee I sing. Home once of Washington, City of Hamilton: Of every worthy son, Let praises ring.

Mistress of all the Wort, Long may thy sway be blest, On all thy people here, Bestow abundant cheer, Greater grow year by year-This prayer I bring.

ALBERT ULMANN An Old-Fashiened Maiden "Where are you going, my pretty maid?"

"I go for a walk, good sir," she said:
"Fresh air, they tell me, 's the road to health And that I must keep on my way to wealth. "What is your fortune, my sensible maid?"

"My fortune's my molding-board, sir," she said;
"I fashion the choicest of pies and cakes,— And better ones, p. ople say, nobody makes ! "And what is your faith, my rich young maid?"
"The faith of my fathers, sir," she said: "The creed that made them loving and true

Is the creed I shall hold my whole life through." "Ah. well, I will marry you, wise young maid !" "Indeed, you will not, good sir," she said; "Of wealth and religion I've none to spare -Since 'tis those you seek you must look elsewhere

The man I shall marry, for love will wedl-So I bid you a very good day !" she raid.

Den't Hook.

Beware of stealing fish 'Tie a double sin they say To hook from a man the fish Which he hooked but yesterdap Tis a triple sin forsooth.

Would the fish have med his fate. If he'd wisely gone his way And hadn't hooked the balts A quadruple sin, alast

For howe'er it may have looked, Before the fish had touched to The balt itself was hooked:

Remember the warning, pray, To hook hooked fish which have hooked booked bait, Is hooking too much for one day.

The Damosel of One Dimension From the Boston Globe.

Let others celebrate the charms
Of ladies fair with figures ample.
Of whom the Medi san is
The Venus serving for example;
I string my lyre to praise of one
Who makes no vulgar, vain pretention
To faccination thro' the field.
The damond of one dimension.

The plump, the pretty, new appear
But coarse beside her givlieh slimness,
Whose rare attentation shows
No trace of ghastliness or grimness;
Altho' its true she dine's suggest
The type you might call tottl frotts,
Her slender form to-day, messenss,
Describes the lauded line of beauty.

I, looking on her lovely length, Abandon with amazing quickness Abandon with sinsking quickness
My orthodox old prejudice—
Revolting seem both breadth and thickness;
How Turks delight to feast their eyes
On fat doth hase my comprehension—
For me, the fairest woman is
The damosel of one dimension.

Her one dimension is enough—
The line that emulates the willows
Own supplie grace is better worth
Then fattened fiesh that rolls and billows:
But does my lady know her charm?
Alas, I'm falled with app when sion
Lest an ulcan transform and spoil
My damosel of one dimension.

In a Garden.

From the Westminster Garette This is my garden-mine Green shade and golden light, That pyram del pine Those pear trees velled in white.

See where the blossoms' snow Falls fake by flate, and lies On the young grass below— Mine is this paradise. Lilac, serings, thors, hisny and sweet to tell, Roses that shame the morn

Come, quiet spirits, ye
Who love green grass and flowers,
Best her; swinie with me.
Nor grudge the idle hours.

Drink peace and quiet here Unto your heat to content, To lest you for a year Dusty and diligent.

The Reformation of Edgar

From the Orioapo Times-Herald. Little Edgar used to run off with the boys to swim, What time his mother est at home and worried over She us d to say day after days "Now, Eddie, dear, Run off again I'll punish you, and tell your father, And then the boys would come along and "holler" at him; "Say. You goin' with us to the lake to have a swim to-day?" Then there would steal o'er Edgar's face a wistful look and sad And he would think how cruel were the parents that he had. And when his mother's back was turned her precious Would sneak out through the creaking gate and breakinto a rin.
Forgettime, as he sped away, the promise he had made.

And stealing humbly home at night, repentant and afraid. Day after day he ran away and dove from logs and do: ks; He risked his life a hundred times among the rafts and rocks: His mother's blows he did not dread, her hand was He felt his father a lashings, but they did no good at He promised nightly to reform—apon his kness he dency; he would be a naturalized citizen. And when the boys came by, next day, forgot and joined the crowd.

One morning Edgar's father, who sometimes induged in thought.

Said to his son: "I'm glad that you go swimming, as you ought!

And do no fail to go to-day, my predous little lad—
Go down and duck and dive and swim and make Thus daily Edgar's father spake, in earnest tones to And lo! that urchin straightway seased to care to go to swim.

From Bede's Budget. O the wheat is wearing whiskers
And the corn is wearings it.
And the stocks are waving tass is all so fair,
And the berries blu h for pickers,
And the cows give butter milk,
And the thistle down is deating in the als.

And the argus eyed new tater
Is a people' from the hil.
And the tax args, won't you twist me into twine?
And the ghost-d at rosered miller
Is a-grinding at the init.
And the puna'in is a pullin' at the vine.

And once more 'tis Indian summer For the weather's amoky bine, And the little ones are swing ng on the gate,
The meion and the cucu mer.
Are both making much ado. And the officeseeker's seeking o'er the Biate.

And we hear the loud exhorters. For the now campmeeting time, And the clickens are alarting very low, And the harvist mean gives quarters. To all those without a dine. And lovers stroll where gentle bresses blow. And Jack Frost his nest has feathered, And the squirrel- are in glee. And the thresher's hum is heard throughout the

land,
And the nuts will seem be mathered.
And we'll have a husking bee,
And nature's music heats the Rossa band. And the cider press is grinding All the nectat form the fruit, And the farmer takes his summ unto the fair, And we see the goind a climbing. While the refee follow suit. OURSTIONS AND ANNWERS.

Mr. Appleton Morgan writes that the bill creating a park near the Poe cottage did not bestow any name on the park; that the Shakespeare Society, which proposed and pushed the bill, intended With the noteworthy extension of the market for call the place "Poe Park," not Poet's Park, and that

Kindly give a complete description and informa-tion of the monument erected in Riverside Park "to the memory of an amiable child," and oblige, U. W. W. the features which distinguish the American methods of construction and design from those of

Pos Park is the real name.

The monument is a short distance northwest of Grant's Tomb; it is enclosed in an iron fen e 814 feet square and consists of a marble base surmounted by a marble urn. On one side of the base is this inectiption: "Erected to the memory of an amiable child, St. Claire Pollock, died 15 July, 1797. in the 5th year of his age." On the opposite side is this inscription from Job zvi:

"Man that is born of a woman is of few days and full of trouble. He cometh forth like a flower and is cut down. He fleeth also as a shadow and con-

Stondard-The University Settlements are called so secause they are settlements of university or college graduates in poor districts. The name origi-nated in London. Their object is to help the poor among whose homes they are situated, and to help the "set lers" to understand the needs of the to that they may work among them more intelligently.

Some time ago you reviewed a book by an Engian Admiral, who, at the time the book was written, was a midshipuran in the Biritish Kavy, and was stationed in the block ading feet off New York harbor during the Revolutionary War. I am desirous of reading the book, but can't remember its title. Can you help me? Ambitious and Uncertain .- Stay at your present

job, trying every day to make yourself more pro-ficient in it, even if it is only an office boy's work, until you can determine what you'd like better to do. Then see if you can do that.

Has the Sheriff of a county the power to call out the militis of the State? E. K. R. In case of riot, insurrection or breach of the peace, he has the power to call out the militia in his wn county and in the adjoining counties.

J. W. S .- James Pink, Jn., was shot on Jan. 6, 1872. He died the next day.

"Ferstes."-Mr. and Mrs. Grover Cleveland have a son, born a year or so ago. Subscriber.-All the classical Greek and Latin writers are obtainable in translations; perhaps Palmer's translations of the Odyssey is the best,

Jowett's of Plato, and Plumtre's of Sophocles

Rolfe's "Friendly Edition" of Shakespears is as good as any; it has sensible notes. Harye-After eating a philopoena "give and take," only the player who gives can say "philopona;" the aker is purely on the defensive.

Charles P. Judge-There is no law preventing the erection of manufacturing plants in Ir-land. The chief drawback to the development of Irish manu-facturing is the lack of good coal.

e. c. c.-Of the 62,622,250 persons in the United States in 1890, only 20,612,806 Were classified according to religious belief. Of these, 6,257,871 were Boman Catholics, the rest were Protestante, Jews and members of other denominations. Of the whoff population in 1890 it is estimated that about 9,000,000 were Roman Catholics.

1. Are there assistant paymasters in the army or Navy appointed from civil life? 2. If so, are the re-quirements mental and physical? 8. Where can applications be filed? A. F. R. Naval paymasters are appointed from civil life; some army paymesters are, too. 2. There are no pecific requirements in the army; a person ought to be a good secountant, and in good health. Naval pay masters must be young, good accountants and in ood health. S. With the Socretary of War and the ecretary of the Navy.

C. H. P.-The ferry boat Westfield blew up on Sunday, July 80, 1871.

J. M. B .- When Li Hung Chang visited Grant's Tomb he was carried in his chair by four policemen; his regular bearers had been left behind.

E. J. MeG.-Hell Gate rock was blown up on Bus day, Sept. 24, 1876, and on Saturday, Oct. 10, 1885. | skill and good faith of the individual workman. P. A. G .- Adelina Patti was born in Madrid; her never sang in the streets to earn her bread.

E. B .- No part of the Jersey coast belongs to the State of New York. The limits of the Customs District of New York include Jersey City and Hoboken in New Jersey; but that arrangement does not affect the State boundaries in any way.

and literature. The language, called Eree, was a branch of the Gaelie, it is still spoken on the Arran slands, and in some other parts of Ireland. D. L. W .- The first Lieutenant-Governor of New

E. K.-The Irish had their own national language

York was Pierre van Cortlands, who had been Presi-dent of the Council of Safety; he was elected along with George Clinton as Governor, and took office July 9, 1777; he went out of office also with Clinton, in April, 1795.

What was the Edict of Nantes? P. L.

IV. of France as Nantes, the capital of Brittany, on pril 18, 1598. The decree was in four parts; the first part consisted of ninety-five public articles, the second of fifty-six "secret articles," the third was the brevet" or patent of the King; the fourth, dated April 30, 1598, consisted of twenty-three secret articles. The Edict gave to the Protestants in France the right to dwell in France with perfect liberty of conscience, and to of higher rank under it could have services on all occasions and for all comers; the people could meet for service at cities where they had met in 15uf-97; and a second city in each bailiwick of the kingdom was allowed in which the Huguenots could meet. Universities and schools were opened to the Huguenots, who could found schools for themselves also; and portions of existing cometeries as well a new burial grounds were set aside for them. The Huguenots were placed on an equality with the Roman Catholics in civil matters. An allowance of 45,000 crowns was made in the "brevet" supposably for the Protestant ministers. The Edict was put in force on March 17, 1599. It was revoked by Louis XIV. on Oct. 1, 1684.

F. J. C .- Irving played "Yaust" in this city at the Theatre on Nov. 7, 1888. Miss Terry played Marquerite.

An American can foreswear his citizenship and be-An American can foreaver his citatanana and come a subject or citizen of another Stars, then return to the United States and become a citizen again by swearing his allegiance the same as all foreigns. Is that citizen eligit le for the Presidency? Will he be considered a native or a naturalized citizent E. A. C.

We doubt that he would be eligible to the Presi-

Can a sailing vessel sail closer to the wind than G. H. F. A good sailboat can sail within four points of the

B. C.-No negro has ever been Secretary of the Treasury; but the late Blanche E. Bruce, at one time Senator from Mississippi, was Register of the Treasury from 1881 to 1885, and from 1897 until his death last year.

1. What is the smallest amount that it is possible to invest, or the smallest number of chares it is possible to buy of any or all the storas on the market? 2. Kndly explain the methods of buying a market, the few or commissions, &c. 3. What is the difference between common and preferred stock? K. 1. On the Stock Exchange, ten shares of stock,

one bond. 2. On the Stock Exchange, buying on a margin is a transaction by which your broker holds ten or more shares of stock for you, on your paying him 10 per cent, of its par value. If the stock falls in price, more than the 10 per cent, you have deposited, he sells out and you lose; if it rises, he sells when you direct, and credits you with the rain less his commission. The usual margin on a first transaction is from 5 to 10 percent., and on an active stock the broker will account in a day. The brokerage fees are one-eighth per cent, for buying, and me-eighth for seiling. S. Preferred stock is stock entitled to a certain fixed dividend before the common stock gets anything.

Did a Spanish buil fight ever take place upon the Island of Manhattan? G. W. L. On July 31, 18-0, an attempt was made to give a buil fight in the "Central Park Arens," at Sixth avenue and 116th street. Mr. Bergh prevented the bulls from being maltreated, and the performance was tame and uninteresting. There were to have been three fights, but only one of them took place.

N. P. S .- The five oldest colleges in the United States are Harvard, 1680; William and Mary, 1693; Yale, 1701; University of Pennsylvania, 1740; Princeton, 1746. We don't know the name of the

AMERICAN MACRINERY.

American machinery and machine-shop products,

An Expert's Reasons for its Unrivalled Excellence. From Caszler's Magazine

of the imperfections.

other nations have acquired a widespread commercial interest. It has been often stated that the American method is to manufacture machinery on the interchangeable plan; or that the only difference between it and the methods of other countries is in the extensive use of automatic machinery; and, again, it has been stated that Americans make better machinery because they concentrate their attention on specialties. This, however, is only half the truth. The American method, and it is a vital point in the American system, is to work be tween fixed predetermined limits of inaccuracy or error. Other builders make their machine details more or less imperfect and correct the faults as well as may be in the assembling, while Americans

To the public mind a machine is just an assem-

blage of shafts, wheels and details which go when power is applied to move them. Comparatively few know that if those shafts do not lit the bear ings in just a certain way, and that if the axial centre lines of the shafts are not almost mathematically correct, the machine will fail to work, and that the inaccuracy which, if too great, ensures the breaking down of the machine, must not exceed, in many cases, a few thousandths of an inch. Take, for example, a pulley turning on a shaft,-an elementary machine. The pulley is put in a lathe and the hole is bored for the shaft The first difficulty is met at once, - all lathes are inaccurate; none bores a round straight hole of like diameter throughout. The bore of the pulley will be more or less out of round, crooked and tapering. Wherever the bore is out of round. tapering or crooked, at those points the surface of the shaft will squeeze out the oil and will rub against the surface of the pulley, and, if the inaccuracy be beyond certain limits, the wearing surfaces will be destroyed, as though there had been no lubricant. On the other hand, the life of the wearing surfaces will be protonged indefinitely if the bore of the pulley and the shaft were absolutely straight, round and uniform, with smooth, highly polished surfaces, and if the shaft diameter were of exactly the size to allow the oil to flow between it and the pulley. The fitting of a machine, therefore is of the highest importance; even a well designed machine may be wrecked by incorrect fitting, and the life or wear of every machine is dependent on the workmanship shown in this matter. In case of the pulley and the shaft the error allowable in practice is quite large. The shaft may shake in the pulley bore, the difference in the respective d meters may be one hundredth of an inch without harm, but it is altogether another matter with other classes of machinery. In printing presses, for instance, where there is a series of successive operations, no such error can be tolerated. Here the movements are driven by gearing trains, and if the shafts shook ever so little in their bearings, the ink roller would distribute the ink unevenly, the time of the operations would become irregular and the gear teeth would break. Here, then, very close fitting is indispensable, and the error limit would be expressed in a very few thousandths of an inch.

In the town of Liege, Belgium, a very important industry is the manufacture of revolvers and other small arms. The details of these are given by contract to workmen, who finish them at their homes, all the work being done by hand, prac-These details, when finished, are brought to the factory where they are assembled. The fitter, having a lot of details before him, selects set and proceeds to make one piece match the other. There is nothing standard about these details, and each revolver or gun made under this system is unlike the other. The grade of the work and fitting depends entirely upon the and when out of order, the entire piece must be returned to the factory. Obviously this would be a wretched weapon wherewith to fit out an army. In this manner all firearms were manufactured until the beginning of this century.

When Eli Whitney, the inventor of the cottongin, was unable to secure his rights for that invention and found himself loaded down with debus incurred in the attempt, he could never have suspected that it was to be a blessing in disguise to his country and even to him. Seeing no prospect of obtaining justice, he turned his ingentous mind into another path, and in 17.8 he took a contract to furnish 10,000 stands of arms to the United States Government. The time for fulfilling the contract

was two years. To appreciate the difficulties of his undertaking we should bear in mind that there were few workguns. He was not only an inventor, but also a remarkable workman, having been accustomed, from his earliest boy hood, to exercise all the trades. in addition to being a hard student and a close observer. He was driven by the force of circumstances to base his plan of manufacture upon making the parts of his guns alike and of uniform excellence by special tools. His contract took eight years in place of two, but it was completed to the perfect satisfaction of the government. He consed to take similar contracts until his death.

His factory was near New Haven, Conn., at the present village of Whitneyville; and out of this place came the Vankee tool-maker, another schoolmaster, who was destined to educate the world in the art of ironmaking. To explain Whitney's method, let us consider again the pulley and shaft. We have seen that it is very difficult and time killing to bore out the pulley in a lathe with a turning tool. A dozen pulleys bored out in this way would all have different diameters. They may be likened to the details made by the Liege gunsmiths. Each shaft would have to be turned by itself to fit a particular pulley; each would fit only one pulley. If we rough out the pulley to nearly the desired diameter and then remove the rest of the metal by a special tool (a reamer), we shall get all twelve pulleys nearly alike, with holes straight and round. If, now, we make plugs, one to fit the largest and one to fit the smallest hole and turn the shafts to sizes between the plug diameters, the shafts and pulleys will fit interchangeably. Here we have the elements of Whitney's inventionsspecial tools to produce extreme accuracy and perfection of workmanship, and guages to measure and limit the amount of error or departure from the

exact size desired. In gun-making, a model is made which is taken as perfect. Two sets of guages are made; one set is kept for reference only, and the other is sent to the shop. Every piece coming from the shop is carefully measured and tested by impectors—skilled workmen who do nothing else—and every piece which fails to measure between the desired limits is condemned. In fact, the limits for many details are almost too small to be considered, being less than one-thousandth of an inch; for other de-

tails the limits are wider, The pieces which pass inspection are absolutely interchangeable, and a revolver or gun made by this method can reach perfection in fitting. Of ourse, any breakage of these arms in the can be replaced at once from a store of duplicate parts. To obtain the desired perfection and accuracy, each operation is subjected to a careful exnation, study and analysis, and special tools and devices are gotten up for every operation. The workmen who do this are called tool-makers.

powers of mind and hand; his interest never flags, for the responsibility for imperfect work is put at once upon him. In this way he feels that he is an important part of the whole. The manufac-ture of machinery by this method places it on a higher plane. It requires great refinements in measurements, close observation, and careful study. It is, in fact, a training school for thinking and skillful mechanics, and it is, undoubtedly, a chief cause of the marked fertility in Amerigan inventions. The close union which it has

brought between the designer and the workman has proved of the greatest benefit to both. To the writer, the most striking feature in many of the European machinery exhibits at the World's Fair at Chicago in 1893 was their academic design. Evidently they had been made with but a superficial knowledge of shop practice and of what is needed for a machine to stand up to its work all the year round. With Americans it is no uncommon usage to invite criticism of the design and suggestions for improvements from he men. Written forms are furnished for these, which are gone over with great care by the management Some works go so far as to offer prizes for valseek to have the details right and perfect, reducing uable hints and ideas from the workmen. to the lowest possible the number and importance

From Whitney's factory his methods spread with great rapidity over all New England, and were applied to the manufacture of countless articles in metal. The art was quickly developed by a multitude of bright workers, and it was applied to heavier machines in time, so that, at present, it is the system of all the best American workshops. The extent to which special fixtures are practicable depends upon the quantity of the product which may be sold. Guns, sewing-machines, typewriters and the

like will pay for a large investment in special tools. In fact, they cannot to-day be made in any other manner. The system is highly developed also in the manufacture of locomotives, pumps and other heavy machines of which the output is large. Where it cannot be applied profitably to heavy pieces, it is used in the manufacture, in quantity, of the small details. Lathe builders, for example, make the details in large lots by special tools and fixtures, keeping them in stock until needed for their orders. This method of working has given Americans a prominent place in the invention and use of auto-

matic machines. From the use of fixtures and special tools to the fully developed automatic machine for reaching the same end it is simply a matter of a few steps; one leads up directly to the other. Hence, the infinite number of ingenious automatic machines for every purpose. Naturally also, the system has led Americans to concentrate their energies upon special types of individual machines. The large first cost of fixtures and special tools prohibits any one from covering too wide a field, and American shops have, therefore, found it more profitable to turn out a large product of a highly perfected specialty.

A notable effect of the method is the successful

standardising of details which enter into all atructures of mechanical engineering. These standards have become so common that they are accented as matters of course. Systematic mechanical training has led Americans to appreciate the value and importance of reducing all details in general use to standards, and this has progressed so far that to-day the manufacturer of machinery can buy all these things at less cost than he could make them, with any desired amount of accuracy and finish.

American methods of accurate measurement have greatly advanced the manufacture of small tools, equares accurate within a fraction of a thousandth of an inch, micrometers in many forms which are so generally used by American workmen, scales in great variety and of extreme perfection, all at prices which put them within the reach of any one.

Thus we see that progress in mechanical engineering in the United States is not simply a happy accident, but a logical result and growth which began nearly a century ago by placing the study and manufacture of machinery on a higher plane skillful mechanics of high intelligence and exceptional skill, and has developed as never before their powers of observation and invention. It has brought about a happy union between workman and designer, each respecting the other. The merit and excellence of the American machine is due to highly specialized tools and fixtures which have cost not only a great deal of money, but what is more important, the exercise of great skill and incan product cannot be copied otherwise than by

like methods. HENRY B. BUISSE. AMID MOUNTAIN WILDFIRES. Seven Men Saved by a Change of Wind After They Had Abandoned Hope.

From the San Francisco Chronicia. PASADENA, Sept 4 - Seven men lay down, expecting to die, in the Sierra Madre mountains men and but little knowledge of the art of gun-making in the United States, and there were no forest fire which was started in Stoddard's canyon machine tools. The milling machine had been on Sunday, Aug. 27, by a party of campets. De-The Edict of Nantes was a decree signed by Henry | described in France in some publications, but not liverance came to them at the last moment, and end an advantage to Whitney that he was forced to shing, but their coats, hats, picks and shovels think out an entirely novel way to manufacture his were consumed. The exciting story was brought out this afternoon by Forest Supervisor W. A.

Borden of this city, who has been fighting the fire. "On Wednesday," said Borden this evening, "Ranger Norman Allen and six Ontario boys had dug a fire line castward from San Antonio canyon a few hundred yards. They thought they had the fire controlled behind them, but it got below them without their knowledge. They left a number of men to fight back, and these seven went on ahead toward Cucamonga canyon, three miles away, expecting to reach their destination by 4 o'clock in the afternoon. It was hot, and they carried shovels and picks, so they stripped off their coats and vests and hurried on. There is no large tim-

ber here, only brush, through which the fire jumps. "A mountain fire is a queer thing; sometimes it skips a whole acre seemingly without reason. The men could hear the flames crackling above them, but thought themselves safe. They did not know that the fire had been controlled by the men below them. A wind sprang up. The smoke grew dense and the flames came down the mountain side with terrific speed. You may not believe it. but the flames in a mountain fire travel sometimes faster than a horse can trot. Norman Allen and his men saw the great fire coming with great bounds toward them. The smoke was stifling and the men could not see where the fire was. It seemed to be all around them. In such a situation as this men have lain down flat on the ground and have been burned over without being killed.

"But Allen and his men, overcome by the smoke, did not have much hope. They all lay down to die, too much overcome to give each other any essages or anything, but just then the wind changed and one of the men, Allen, I think, looked up and caught sight of a green patch on the border of Cucamonga, where there is a small stream. Boys, we're saved,' he yelled, and they all jumped up and ran to the green place, where the fire burned more slowly, giving them a chance to make a rocky place further on, where there was no brush and the fire could not burn. No, the men didn't desert after that. They are all up there now fighting fire. They lost everything they carried. Ranger Thomas has their names I did not get them. I will recommend them to the Interior Department.

Way Through College. From the Chicago Times-Herald.

Jim McCleevy, a thoroughbred colt that has been recing to win movey to fornish his owner. More Jessie Flansgan of Council Bluffs, money for her education, was claimed out of a selling race at Hawthorne yearer(ay by V. Hughes & Co. The loas of the colt may shorten the young woman's college course she is about to enter they

The workmen who do this are called tool-makers.

Comparing the two methods, we find that the Liege workman is bound down to a life of irksome toil, deadening to mind and body. Each day brings a repetition of the same work, with nothing to lighten it, nothing to render it bright or interesting. His dull task is to supply a quote of objects, chipped and flied near enough to the model to pass inspection.

As a man's faculties and energies vary from day to day, so also the quality of his work must fluctuate. The American plan is to turn the drudgery over to a machine. The tool-maker sets the machine, the special fixture or device, and when it has been started, performing the work to his satisfaction, he leaves it to be attended to by unskilled labor, while he takes up something else. Every day new problems some to stimulate his

SWAN LAKE'S SNAKE EXIT.

BEGAN WHEN A REPTILE SWALLOWED AN ALARM CLOCK. The Clock Belonged to Some College Office

Who Were Taking a Ewim-It Started a Procession of Snakes to shore and Made a Panie Among Summer Boarders BELFAST, Ma, Sept. 15 -- Nobody believed there were many water snakes in Swan Lake until Clark hiangen started out to avenge the loss of his young ducks. It is a small lake of clear water in the heart of Waldo county. There are high hills with orchards and potato fields on the sides. The south end borders a swamp the chief products of which are crapberries and water snakes. In the summer and early autumn men and women in outing suits and tan shoes go there to get up their muscle and lay on a coating of birdseye freckles, gaining all the

No snakes were seen in the lake until the summer visitors came. As soon as the fishermen began to stock the waters with smelts for the landlocked salmon the banded tailed snakes of the swamps took on aristocratic tastes, invading the lake for the purpose of catching smelts, and scaring timid men and women out of their wits as a side issue.

benefits of a trip to Bar Harbor at less than half

Miss Minnie Colcord of North Searsport, and three Wellesley College girls, paddled to the middle of the lake one hot day in August to catch square tailed trout and have a long swim in deep water. As they were their bathing suits, they took an alarm clock along to notify them when it was dinner time. It was a harmless-looking cylinder, of nickel which did not cost more than fifty cents when new, but which was capable of giving out \$10 worth of noise every time is was wound up. After the girls had caught all the trout they needed, they had a dip in the lake, acting as girls generally do when they know there is no man within a mile of them. They had lately read in a book an eloquent discourse on how to get into a cance when it is affoat, without tipping it over. No Wellesley college girl would ever dare to follow the printed directions when there was a man around, but here was a free field with no handicap, and one of the undergraduates made a bold vault, landing on bow of the cance in an attitude that could not be called graceful. If it was easy to jump into the boat it was easiler

to get out. With a yell of "snakes" and a tragic unlifting of hands she fell back into the water. Her companions pitied her and took the needless precaution of throwing water into her face until she had regained her composure. Then they took a look over the gunwale of the boat, shricked "snakes" in chorus and struck out for the cottage a mile away, beating the best swimming record ever made on the lake. Three men who went to rescue the abandoned cance found a dezen or more great banded snakes coiled up under the thwarts among the remnants of a trout dinner. While they were discussing how to kill the snakes without injuring the cance a loud, metallic sound began to pour out from among the alceping reptiles. It purred and whirred and rattled until every snake was wide awake and frantic with fear. They darted at one another, striking their yellow fangs deep into the fiesh of their companions, and coiling and uncoiling so rapidly that the men could hardly take note of the movements. As the rattling din continued the smaller snakes turned on the largest one and bit it so hard that it leaped overboard for safety, followed by the others. The men saw the line of serpents fleeting across the lake and gave chase. With a man on each side to ply the paddles and another at the stern to steer, they made good progress, but fast as the cance went, the snakes gained upon them, reaching the shore a quarter of a mile in advance. The cottagers, who were curled up in hammocks

or sitting in easy chairs on shady plazzas awaitthan it had ever previously occupied. The system ing the dinner call, were treated to a strange then commenced has produced generations of spectacle as the giant snake, driven from the water by the assaults of its companions, came up the grassy paths to the little village with the avengers in hot pursuit. The big fellow wriggled in and out among the abrubbery with the minor snakes behind, the aggregation making a line of reptiles fully three rods long. Whenever the serpentine procession crossed a plazza its passage was punctuated with yells of terror. The men who saw the snakes hunted up clubs ventire ability, and the good features of the Ameri- and revolvers. Some of the women fainted, Others locked themselves in their bedchambers to await a terrible death. Men who had resolved to lead a better life awore with spontaneous emphasis, some of them at the snakes and others at the folly of the women. When the tumult had subsided four of the snakes, including the leader. lay dead upon the lawn. The others escaped to the lake or hid away under the cottages. Noticing a swelling midway in the body of the longest snake it was cut open, revealing a nickel alarm clock, which was recording the passing minutes in unruffled composure.

Before this thrilling event came off Manden, the custodian of the grounds, had been laying cunning plan to slay the anakes had a large flock of young ducks with tan bills and feet and neat outing suits of pale green. The ducks liked to swim in the waters of the lake, and the snakes liked to see them swimming there, because whenever the snakes and the ducks met the snakes had a hearty meal, and Manden's duck tally didn't come out even. Since quitting the swamps the snakes had fitted up apartments for themselves in the cleft of a ledge that butted into the lake. The entrance to these chambers was under water, except in very dry seasons. This year the drought combined with big drafts made upon the lake by the mills at the outlet, had run the water very low, exposing the door to the den of snakes and leaving four or five rods of sandy beach exposed to the sun. A wet snake is not fond of crawling over hot fine sand. The sharp grains cling to its skin, causing much annoyance. Manden had noted the reluctance of the snakes to enter their home. With the memory of lost ducks still fresh in his mind he laid a plan to accomplish the destruction of use less creatures that destroyed his property and drove paying patrons away from the cottages.

One morning he attached his horse to a dump cart and went away to the east side of the lake. When he returned late in the afternoon his cars held a half a ton of broken glass which he had begged from the proprietor of the glass-blowing works. He made similar trips every day for a week, dumping the sharp fragments over bank, near the home of the snakes. Then he waited for a windy day, knowing the snakes would not care to venture abroad in rough water. On the afternoon of Sept. 5, when the gale was throwing sailing craft against the shores of New Brunswick and Nova Scotia, Manden went to the border of the lake with a wheelbarrow. He worked hard for two hours, building a broad semicircular wall of broken glass around the mouth to the cave of anakes. Then he went home

and let out his ducks. No snakes were seen in the lake for a week, Curious persons who took pains to creep up to the crystal barrier saw great heaps of hungry and sad-eyed snakes twisting about in the space between the wall and the opening to the cave If anybody made a noise the serpents went out of sight in the darkness under the bluffs. The cottage-s war-sed so load a gun with fine shot or salt and shoot the snakes, but Manden resisted

the idea successfully, saying: "Let 'em be an' suffer. Didn't they kill my ducks, blast them? They must climb over that glass or starve to death, so they're sure to die anyway, unless the water rises and lets them swim out"

The seleagured garrison stood the slege for six days, while the visitors stood by to witness the torture. On Sept. 13, a sortie was made, Manden saw a dozen or two of the leanest ones scaling the walls and staining the glass with blood, and called out all hands to witness the final act. The snakes moved in steady lines of bottle green and drab for nearly an hour. The glass was wet and the dry sand turned red, but procession never stopped until the last snake had committed suicids. The bodies of 416 snakes were counted on the sand. Some of them we six feet long.

The Quick, the Dead and the Other Prom Samskins.

Mrs. Casey and Mrs. Murphy met in a street-ma and were discussing family affairs. "And how many children have you, Mrs. Murphy?" "Foirs. Two Mvin', two dead, and wan in Bhiling delphy."